AMENDMENTS TO THE CLAIMS

1. (currently amended) A method for growing cells comprising

reviving cells stored ~~for culturing~~ in the presence of a cryoprotectant, wherein the cells are diluted in a growth medium without removing the cryoprotectant such that cell viability is maintained, and

culturing said cells.

2. (currently amended) The method of ~~defined in~~ claim 1 wherein the cryoprotectant is DMSO.

3. (currently amended) The method of ~~defined in~~ claim 2 wherein DMSO is present in an amount of less than about 2% by volume based on total volume of cells and media present.

4. (currently amended) The method of ~~defined in~~ claim 1 wherein the cells are grown in a self-contained cell culture vessel.

5. (currently amended) A kit comprising

a self-contained cell culture vessel comprising a cell reservoir, a media reservoir, and a gas reservoir;

cells and a cryoprotectant disposed in [[a]] said cell reservoir;

a liquid cell culture ~~media~~ medium ~~of~~ disposed in ~~an internal chamber of the vessel or in a~~ said media reservoir in ~~of~~ an amount capable of diluting the cryoprotectant to a volume suitable for cell growth; and

gas disposed in the gas reservoir.

6. (currently amended) The kit of ~~defined in~~ claim 5 maintained at a subzero temperature.

7. (currently amended) The kit of claim 5, further comprising an internal chamber. ~~A method for growing cells in a self-contained cell culture vessel at a temperature suitable for cell culturing comprising:~~

~~incubating the kit defined in claim 5 or 22~~.

8. (currently amended) The kit of ~~defined in~~ claim 7, ~~5~~ wherein

~~the cell culture vessel comprising~~

the internal chamber defines a space therein and has an internal surface;

the internal chamber defines at least one optionally sealable port or channel;

the internal chamber defines at least one sealable opening for receiving a gas reservoir capable of fluid communication with the internal chamber;

wherein the gas reservoir contains a valve or removable seal ~~defined between the gas reservoir and the internal chamber or the gas reservoir is a self-contained reservoir that is capable of being disposed of within the internal chamber~~;

wherein the cell reservoir is capable of fluid communication with the internal chamber and defines an optional valve or seal therebetween;

wherein the media reservoir is capable of fluid communication with the internal chamber and defines an optional valve or seal therebetween;

wherein the vessel is capable of being sealed; and

wherein the vessel is made from a material capable of withstanding subzero temperatures without degrading.

9. (currently amended) The kit of ~~defined in~~ claim 8 wherein the vessel further comprises

a liquid impermeable flexible partition having two sides displaced within the internal chamber, the two sides defining a first and a second space within the internal chamber;

wherein the partition is capable of exchanging gas between said first and second space;

wherein the first ~~side defines a first~~ space is capable of ~~for~~ containing a liquid ~~which is~~ in communication with at least one port or channel, and defines a sealable access port, and

wherein the first space is capable of fluid communication with the cell reservoir and/or the media reservoir;

wherein the second ~~side defines a second~~ space is capable of ~~for~~ containing a gas, and said second space ~~which~~ is capable of fluid communication with the gas reservoir; and

wherein the edges of the partition are sealed to a portion of the internal surface of the internal chamber to prevent liquid communication between said spaces.

10. (currently amended) The kit of ~~defined in~~ claim 9, wherein the second space for containing a gas is further defined by ~~vessel further comprises~~

a fluid and gas impermeable expandable wall affixed to a rigid wall of the internal chamber and forming an integral portion of the internal chamber~~; and~~

~~wherein the fluid impermeable expandable wall and the partition define the gas space~~.

11. (currently amended) The kit ~~defined in any~~ of claim 8 ~~claims 5-10~~

wherein one or more of the valves or seals is capable of opening and closing;

wherein at least one port or channel sealably connects to at least one additional media chamber through at least one fluid channel, wherein at least one valve or seal is displaced between each port or channel and each media chamber; and wherein the media chamber is located externally to the vessel;

wherein at least one port or channel sealably connects to at least one absorbent chamber, wherein at least one valve or seal is displaced between each additional port or channel and the absorbent chamber; and

further comprising a cell filter ~~proximal to each valve or seal and~~ between each valve or ~~and~~ seal and each absorbent chamber.

12. (currently amended) The kit ~~defined in any~~ of claim 7 ~~claims 5-11~~,

wherein the gas reservoir is a self-contained capsule disposed within the internal chamber.

13. (currently amended) The kit ~~defined in any~~ of claim 7 ~~claims 5-12~~,

wherein the gas reservoir is disposed outside the internal chamber, and is sealably connected to the internal chamber.

14. (currently amended) The kit ~~defined in any~~ of claim 7 ~~claims 5-13~~,

wherein the cell reservoir and the media reservoir are contained within ~~present in~~ the internal chamber.

15. (currently amended) The kit ~~defined in any~~ of claim 7 ~~claims 5-14~~,

~~where in~~ wherein the cell reservoir and/or the media reservoir is a self-contained capsule.

16. (currently amended) The kit ~~defined in any~~ of claim 8 ~~claims 5-15~~,

wherein the seal or valve defined between the gas reservoir and the internal chamber is selected from the group consisting of a) a temperature or electrically sensitive seal ~~plug~~; b) a diaphragm adapted to be penetrated, or c) a mechanically, thermally or electrically operated valve.

17. (currently amended) The kit of ~~defined in~~ claim 16,

comprising a temperature sensitive seal and further comprising a safety seal ~~in addition to the temperature sensitive plug~~.

18. (currently amended) The kit of ~~defined in claims 5-17~~ claim 8,

wherein the internal chamber is removably or fixedly connected to at least one measuring device via at least one port or channel.

19. (currently amended) The kit of ~~defined in~~ claim 18,

wherein the measuring device is a ~~at least one~~ Micro Electro Mechanical System (MEMS) and/or high performance liquid chromatograph (HPLC).

20. (currently amended) The kit ~~defined in any~~ of claim 18 ~~claims 5-19~~,

wherein ~~at least one~~ a port or channel defines ~~at least one~~ a mechanism to provide fluid communication between the internal chamber and the measuring device.

21. (currently amended) The kit of ~~defined in~~ claim 20,
wherein the mechanism is a ball valve or a perforable diaphragm.

22. (currently amended) The kit ~~defined in any~~ of claim 8 ~~claims 5-21~~,
wherein the internal chamber defines one or two ports or channels.

23. (currently amended) The kit of ~~defined in~~ claim 21,
wherein the measuring device further comprises a member for operating the ball valve or for penetrating the diaphragm.

24. (currently amended) The kit ~~defined any~~ of claim 18, ~~claims 5-23~~ further comprising
a filter within ~~on~~ the port or channel for preventing contamination in the internal chamber.

25. (currently amended) The kit ~~defined in any~~ of claim 8, ~~claims 9-24~~
wherein the sealable access port is removably sealed with an access port closure.

26. (currently amended) The kit ~~defined in any~~ of claim 8, ~~claims 5-25~~ further comprising
at least one sensor externally connected to at least one port or channel or disposed inside the internal chamber.

27. (currently amended) The kit of ~~defined in~~ claim 26, ~~19~~
wherein the sensor senses oxygen, CO_2, or pH levels.

28. (currently amended) A method ~~to~~ for transporting cells from a distribution site to a transplant site ~~where a transplant takes place~~, comprising
transporting the kit defined in claim 5 [[6]] at a temperature suitable for maintaining cell viability to a transplant site ~~where the cell transplant takes place~~; and
reviving said cells in said vessel at a transplant site by diluting said cells in a growth medium without removing the cryoprotectant.

29. (currently amended) The method of ~~defined in~~ claim 28, wherein the cells are islet cells.

30. (currently amended) The method of ~~defined in~~ claim 28 ~~or 29~~ wherein the temperature suitable for maintaining cell viability is selected from the group consisting of minus 80° C, minus 20° C, and 4° C.